Tips for Automatically Applying Do-It Hang Tabs

If you are looking to automatically apply hang tabs to your product, here are some suggestions on how to modify wipe-on label application equipment to make the process more effective and efficient.

Hang tabs, like labels, need to be precisely placed on a product. Often, the hang tab needs to be placed on the top, back panel of a package. Fortunately, most standard wipe-on label application machines can be modified to apply Do-It Hang Tabs.

Roll Unwind Size

Most hang tabs are supplied on a 16" (40.6cm) outside diameter roll with a 6" (15.2cm) core size. This size provides a reasonable number of parts on a roll while avoiding curvature of parts toward the inside of the roll. While many manufacturers are now making more of their machines with 16" (40.6cm) roll capacity, many existing label machines are designed for 12" (30.5cm) label rolls and 3" (7.6cm) cores. Machines designed for smaller roll sizes may need to be adapted with a longer extension arm and 3" to 6" (7.6cm to 15.2cm) core adapters. Along with the extension arm to accept larger rolls, larger support discs are also needed to prevent the web from unwinding.
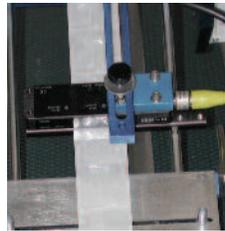
Web Path and Rollers

On any applicator, a smooth, straight, or simple web path from unwind to peel plate is very important. All small-radius rollers and sharp peel angles should be eliminated.

Sharp turns and angles become even more of a factor as the thickness of the hang tab increases. In some cases, the diameter of the rollers will have to be increased or eliminated completely.

Hang Tab Sensors

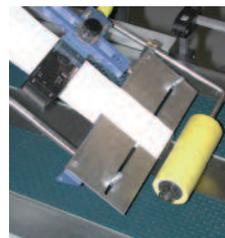Most label machines use a photo electric sensor to "see" an opaque label. Other machines are fitted with a mechanical style sensor. Mechanical sensors measure the variation of thickness of the material passing by to determine when to apply the next hang tab or label. Mechanical sensors are the preferred method of sensing hang tabs (which are similar to clear labels, just thicker). Mechanical sensors do require a more sturdy method of being mounted to the machine and have to physically come into contact with the web. These sensors usually work best with hang tabs that have a thickness of .005 to .030 inches (127µ to 762µ). Electronic capacitive sensors are also available. These help eliminate wear and the need to have different sensors to run a variety of materials.

Peel Plate

The peel plate, located at the point where the hang tab is applied to the product, is another critical component. Peel plates on some machines have an extremely sharp edge to accommodate thinner labels. Thin labels require more peel to be removed from the backing liner. Hang tabs do not need an extremely sharp peel plate. In fact, a extremely sharp peel plate can cause problems by breaking the liner during the application process. Teflon tape can be used on the edge of the peel plate to dull the sharpness and prevent the liner from breaking.

Product Sensor

The sensor to detect the product may vary depending on the application. We usually recommend the use of a retro-reflective type photo electric sensor. These have a more precise signal.

Application Rollers

On most machines, a roller or brush is located just past the peel plate. This first roller is necessary for consistently placing the hang tab in the same location every time. The first roller does not depress the hang tab for extra adhesion. A second wipe roller, located approximately one foot down from the point of application, should be used for pressing the hang tab down.

Pre-Advancement of Hang Tab On Peel Plate

At the point of application, the stop point of the tab should be adjusted to pre-advance the tab approximately 1/16" to 1/8" (1.6mm to 3.2mm) past the peel plate. This helps to eliminate web breakage when the labeler starts up.

Summary

Many label application machines can be easily modified to apply hang tabs. While this flyer may help, please know that you can call the experts at Do-It to help with any hang tab application concerns you may have. Please call us with any questions or hang tab application problems you may have. We are ready to help.