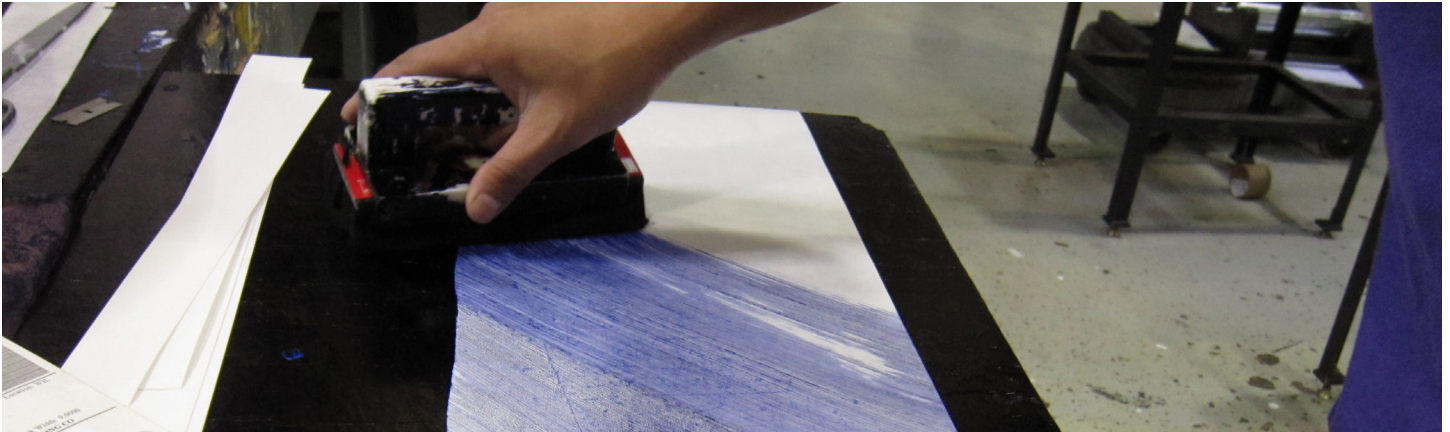


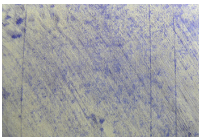
DIE STRIKE



At Wilson, we're always focused on the technical aspects of flexography. TechTalk is your quick snapshot of key topics in our industry. Let us know what you think.

Testing for Proper Die Strike

Generally, the harder the strike is into the liner, the longer the tool will last. That's why it's essential to order a tool with the correct die strike. So how do you determine the depth of cut into the liner from hardest to lightest? It's all in terminology. Here are the key terms we use to describe this important process.



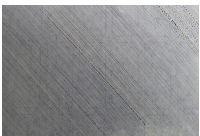
Hit Hard

This is the strongest die strike. There is a possibility of the liner being cut through.



Hand

This will cut through the silicone layer on the liner in spots, but should not cause any blade to cut through the liner.



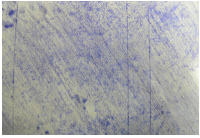
Auto

The Auto die strike will not cut through the silicone, but when the liner is colored, you'll easily be able to see where the die is cutting.

Super Auto The Super Auto die strike is an option but should be used with extreme caution. The strike is light and the ink test may not show a strike but it can adversely affect die life. Discuss with your Wilson representative to determine if this option will be effective for your job.

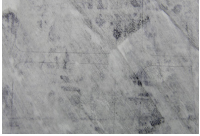
Checking for Die Strike

While there are multiple methods to check for die strike, the most common are Dykem or magic marker.



Dykem

Dykem is a water-based method used to test any die strike. At Wilson, it is our typical test method. Because it is water based, it does not remove any of the silicone from the material.



Magic Marker

This method should only be used for Auto and Super Auto die strikes; any other method will show extreme bleed. Because it is solvent based, some of the silicone is removed.

Two Test Methods

We regularly use two additional testing techniques when determining proper die strike: roll test and tensiometer application.

Roll Test

This method is sometimes used for Auto die strike. It's achieved by pulling samples over a 90-degree corner to see if the leading edge of the label starts to dispense. You can also put a loop of material between finger and thumb and roll the material to check if the leading edge of the label starts to dispense.

Tensiometer Application

The proper way to test poly liners is to use a tensiometer. This machine measures the amount of force that can be put on the material before it deforms. We cut the samples into single lanes and stretch the material until it breaks or deforms. If it breaks prior to deforming, it fails the test.