Pressman's Toolbox

Making the wrong impression

By Frank Bourlon

Have you ever seen a loss of impression near the center of the printed page? It resembles a roller bounce problem that is commonly seen on Goss Urbanite and Goss Community presses.

Loss of impression is a non-printed area that is approximately .75-inch to 1-inch wide. The non-printing area will also seem to be a little wider on one side of the printed page than the other. The problem area will seem to be worse and then get better.

Overpacking the blanket cylinder seems to help for a short time but the problem seems to return. Overpacking the blanket cylinder may also cause overfeed, which increases web tension and can sometimes make the web impossible to control.

Overpacking plate cylinder

Overpacking the plate cylinder, another option, will also reduce loss of impression as well, but can cause the unit to throw printing plates.

Pressmen will try to use blanket swell to eliminate loss of impression only to find that the problem returns within a few press runs. If pressmen are using paper packing under the blankets they may use a syringe filled with water to inject the fluid into the paper packing in order to swell this area, which again is a short-term fix. Moreover, injecting water under the blanket will over time damage the blanket cylinder.

One possible cause for loss of impression is a low spot in either the blanket cylinder, plate cylinder or both. The only way to identify the low spots is to remove the blankets and plates from the cylinders in question and inspect them. A dial indicator can be used to detect how much depression there is in the cylinder.

Linkage loose?

The impression linkage can become loose, which will allow the plate and blankets to move as they come in and out of impression. This means that the linkage pins, linkage arms or levers are worn and should be replaced. An option to replacing these components is to drill larger holes in the levers and linkage arms, then mesh them together with an oversized pin.

If the problem still exists, the problem could be the cylinder eccentrics or the cylinder bearings. You can diagnosis this problem by placing a dial indicator on the blanket or cylinder you suspect is the problem. Then, use a bar and try to move the cylinder in question, keeping an eye on the dial indicator to track movement.

A movement of .002-inch or more is unacceptable. It is difficult to tell whether the problem is the cylinder eccentric or the cylinder bearing, so it is best to replace both of these parts at the same time.

In any case, if the movement is more than .002-inch, replacing the eccentrics and the bearings will alleviate the printing problem.

If you have any questions about this article or if I can help in any other way please feel free to contact me.

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