

Preparing your press for SNAP certification

Posted: Wednesday, July 1, 2009

Frank Bourlon columnist

Are you printing the best product you can or do you wish you could produce a higher quality product?

Regardless of whether you're still printing papers at your facility or have outsourced production to another site, one of the most important steps you can take to assure excellent print quality is to attain SNAP certification.

SNAP, for Specifications of Newsprint Advertising Production, are a set of guidelines that define high quality, coldset web offset newspaper printing.

The first step? Visit the SNAP Web site at www.snapquality.com, and download the SNAP test forms and accompanying documentation.

This will help you focus on what's needed to achieve great print quality.

Once you've done that, here are some tips to help you prepare the press for the SNAP test:

- Clean the press: Cleaning the interior of the press will in many cases improve the print quality right away and help identify any underlying problems that may exist.
- Check the condition of the inking system: Calibrate the ink keys so that the ink density can be easily controlled. (I do realize that some presses don't have this capability.)
- Check the condition of the ink fountain roller and the ink pickup roller: Ink fountain rollers should be smooth and perfectly round. Out-of-round ink fountain rollers deliver an inconsistent ink density. Smooth ink pickup rollers hold less ink and more water, making ink and water balance more difficult.
- Check your copper ink drums: Copper ink drums need to have a consistent copper coating across their entire surface. The copper drums may also have an invisible coating build up on their surface, which makes the drum less ink receptive. The coating must be removed so that the ability of achieving good ink and water balance is not diminished.
- Ensure your ink rollers are free of glaze: Glazed ink rollers also reduce the likelihood of achieving good ink and water balance, Rollers that have a durometer Shore "A" hardness of above 45 will normally have a moderate amount of glazing.
- Make sure your ink rollers have the proper pressure: The ink rollers must be checked for the proper pressure so that they have the ability to transfer the ink efficiently to the printing plate. A

roller that is set too tight will not allow the ink to transfer through its nip point effectively, which will cause ink slinging. If the ink roller is set too loose, the ink will not transfer properly from the roller to the drum. This may cause the operator to open the ink keys higher than normal to compensate, which will also cause ink slinging. Set the pressure at 1/16-inch of stripe pressure per inch of roller diameter. In other words, 3-inch rollers would require a stripe width of 3/16-inch.

- **Check the pressure between plate and blanket cylinders:** Proper pressure between the plate and blanket cylinder is necessary for good quality printing. An impression pressure that is too tight will increase dot gain and reduce the life of the blankets, bearings, eccentrics, linkages and press frame. An impression pressure that is too loose will cause a poor transfer of image to the blanket or to the web. Images will be less sharp and may even have a grainy appearance due to the fact that you will be printing off of the paper lint. The ink film will also have to be thicker in order to get the ink to transfer across these nip points, which also reduces good ink and water balance. Again, these problems increase ink slinging. Loose or worn gears, bearings eccentrics or linkages will also produce inconsistent print register.

- **Monitor the water system:** The water system must be checked to ensure an adequate and consistently even amount of water to the plate. If you have a spray bar system, check both the water output and water curve. If you have a brush system, make sure the brush is clean and that it is making proper contact with the chrome roller so that an adequate supply of water can be transferred to the plate.

- **Clean the brush or sock roller:** You should always clean the brush so that it can transfer the water evenly and consistently. If you have a sock system, make sure the sock roller is in good condition. Don't be tempted to use an old ink transfer roller to replace this roller. Many times a press operator will use an old ink transfer roller to replace the sock roller. The thought is that the old ink transfer roller will be covered with a cloth material, which will make the roller good enough to use in this position. This may work, but there will be an uneven flow of water due to the inconsistent pressure across the transfer roller's surface. The result? Poor ink and water balance.

- **Maintain the tension system:** The system should be checked for worn or loose components. Verifying that each tension control is producing the correct amount of tension is important to reduce fan-out.

- **Check the lead-in rollers:** Roller misalignment should be checked to ensure proper web tension across the web and to reduce web-walk. The lead-in roller bearings need to be in good condition to prevent a roller misalignment, which can also cause the web to wrinkle. Cleaning the lead-in rollers will also improve print register and ink set-off.

- **Monitor driveline and gears:** The press driveline and gears should be tight. Worn drive components will cause inconsistent print register and in some cases will affect print quality.

- **Check consumables:** Press consumables such as blankets, ink rollers, ink, fountain solution, plates, the amount of plate and blanket packing, paper and even cleaning supplies can have an

effect on print quality. Poor-quality or incompatible products make printers' jobs much more difficult to accomplish.

SNAP certification is the best way to ensure that your press is well maintained. The SNAP test and certification is worth every penny you spend. Achieving certification will reduce ad credits, decrease newsprint waste, give you better ink mileage and cut the number of customer complaints. π

Frank Bourlon is the executive and training director for the Newspaper Production and Research Center. He can be reached at 405.524.7774.